

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.  
PCT/JP2004/011292

Box No. I	Basis of this opinion
	<p>1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.</p> <p><input type="checkbox"/> This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).</p> <p>2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:</p> <ol style="list-style-type: none"><li>a. type of material<p><input type="checkbox"/> a sequence listing <input type="checkbox"/> table(s) related to the sequence listing</p></li><li>b. format of material<p><input type="checkbox"/> in written format <input type="checkbox"/> in computer readable form</p></li><li>c. time of filing/furnishing<p><input type="checkbox"/> contained in the international application as filed. <input type="checkbox"/> filed together with the international application in computer readable form. <input type="checkbox"/> furnished subsequently to this Authority for the purposes of search.</p></li></ol> <p>3. <input checked="" type="checkbox"/> In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.</p> <p>4. Additional comments:</p>

## **PATENT COOPERATION TREATY**

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

PCT

# TRANSLATION PROJECT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

		Date of mailing (day/month/year)
Applicant's or agent's file reference <b>FP18733WO-00</b>		<b>FOR FURTHER ACTION</b> See paragraph 2 below
International application No. <b>PCT/JP2004/011292</b>	International filing date (day/month/year) <b>30.07.2004</b>	Priority date (day/month/year) <b>14.01.2004</b>
International Patent Classification (IPC) or both national classification and IPC		
Applicant <b>DAIKIN INDUSTRIES, LTD.</b>		

1. This opinion contains indications relating to the following items:

Box No. I Basis of the opinion

Box No. II Priority

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

Box No. IV Lack of unity of invention

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Box No. VI Certain documents cited

Box No. VII Certain defects in the international application

Box No. VIII Certain observations on the international application

## 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP	Authorized officer
Facsimile No.	Telephone No.

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/JP2004/011292

<b>Box No. V</b>	<b>Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</b>	
<b>1. Statement</b>		
Novelty (N)	Claims	2-14
	Claims	1
Inventive step (IS)	Claims	
	Claims	1-14
Industrial applicability (IA)	Claims	1-14
	Claims	
<b>2. Citations and explanations:</b>		
Document 1: JP 07-274938 A (Sapporo Breweries Ltd), 24 October 1995		
Document 2: JP 2003-235544 A (Hitachi Ltd), 26 August 2003		
<p>- Regarding claim 1</p> <p>The invention described in claim 1 does not appear to possess inventive step over document 1 cited in the ISR.</p> <p>Document 1 describes a temperature control device provided with cells, a microplate provided with a plurality of wells for cultivating microorganisms or the like, a thermoelectric cooling device that controls the temperature inside the wells, a coolant circulation device, a temperature sensor, and a copper plate having a thermal conducting effect (see figure 2) and that by using this temperature control device it is possible to carry out temperature control in the wells quickly and with high precision. Here, the thermoelectric cooling device corresponds to "heater" in the present application, coolant circulation device corresponds to "cooling part," and copper plate corresponds to "thermal conducting body."</p>		

(Continued)

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.  
PCT/JP2004/011292

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box V

- Regarding claims 1-14

The inventions of claims 1-8 do not appear to possess inventive step over document 1 cited in the ISR.

In regard to the inventions of claims 1-8, optimizing the shape of the thermoelectric cooling device and copper plate in response to factors such as the shape of the wells in the temperature control device of document 1 would be easily arrived at by a person skilled in the art.

The inventions of claims 9-14 do not appear to possess inventive step over documents 1-2 cited in the ISR.

Document 2 describes a cultivation control device for organisms and cells provided with means for measuring temperature, pH and the like, storage means for storing obtained measurement data, and control means for controlling the cultivation environment based on this data in order cultivate cells and microorganisms in a suitable cultivation environment.

In regard to the inventions of claims 9-14, using a combination of the cultivation control device for organisms and cells provided with means for measuring temperature, pH and the like, storage means for storing obtained measurement data, and control means for controlling the cultivation environment based on this data in order cultivate cells and microorganisms in a suitable cultivation environment with the temperature control device described in document 1 would be easily arrived at by a person skilled in the art.

**PATENT COOPERATION TREATY**

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

**PCT**

*TRANSLATION*

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

(PCT Rule 43bis.1)

		Date of mailing (day/month/year)
<b>Applicant's or agent's file reference</b> <b>FP18733WO-00</b>		<b>FOR FURTHER ACTION</b>  See paragraph 2 below
International application No. <b>PCT/JP2004/011292</b>	International filing date (day/month/year) <b>30.07.2004</b>	Priority date (day/month/year) <b>14.01.2004</b>
International Patent Classification (IPC) or both national classification and IPC		
<b>Applicant</b> <b>DAIKIN INDUSTRIES, LTD.</b>		

1. This opinion contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the opinion
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

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For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP	Authorized officer
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2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material  
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Box No. V	<b>Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</b>																			
<p><b>1. Statement</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; padding: 5px;">Novelty (N)</td> <td style="width: 50%; padding: 5px;">Claims <u>2-14</u></td> <td style="width: 25%; padding: 5px;">YES</td> </tr> <tr> <td style="padding: 5px;">Claims <u>1</u></td> <td style="padding: 5px;"></td> <td style="padding: 5px;">NO</td> </tr> <tr> <td style="padding: 5px;">Inventive step (IS)</td> <td style="padding: 5px;">Claims <u></u></td> <td style="padding: 5px;">YES</td> </tr> <tr> <td style="padding: 5px;">Claims <u>1-14</u></td> <td style="padding: 5px;"></td> <td style="padding: 5px;">NO</td> </tr> <tr> <td style="padding: 5px;">Industrial applicability (IA)</td> <td style="padding: 5px;">Claims <u>1-14</u></td> <td style="padding: 5px;">YES</td> </tr> <tr> <td style="padding: 5px;">Claims <u></u></td> <td style="padding: 5px;"></td> <td style="padding: 5px;">NO</td> </tr> </table> <p><b>2. Citations and explanations:</b></p> <p>Document 1: JP 07-274938 A (Sapporo Breweries Ltd), 24 October 1995    Document 2: JP 2003-235544 A (Hitachi Ltd), 26 August 2003</p> <p>- Regarding claim 1</p> <p>The invention described in claim 1 does not appear to possess inventive step over document 1 cited in the ISR.</p> <p>Document 1 describes a temperature control device provided with cells, a microplate provided with a plurality of wells for cultivating microorganisms or the like, a thermoelectric cooling device that controls the temperature inside the wells, a coolant circulation device, a temperature sensor, and a copper plate having a thermal conducting effect (see figure 2) and that by using this temperature control device it is possible to carry out temperature control in the wells quickly and with high precision. Here, the thermoelectric cooling device corresponds to "heater" in the present application, coolant circulation device corresponds to "cooling part," and copper plate corresponds to "thermal conducting body."</p>			Novelty (N)	Claims <u>2-14</u>	YES	Claims <u>1</u>		NO	Inventive step (IS)	Claims <u></u>	YES	Claims <u>1-14</u>		NO	Industrial applicability (IA)	Claims <u>1-14</u>	YES	Claims <u></u>		NO
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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box V

- Regarding claims 1-14

The inventions of claims 1-8 do not appear to possess inventive step over document 1 cited in the ISR.

In regard to the inventions of claims 1-8, optimizing the shape of the thermoelectric cooling device and copper plate in response to factors such as the shape of the wells in the temperature control device of document 1 would be easily arrived at by a person skilled in the art.

The inventions of claims 9-14 do not appear to possess inventive step over documents 1-2 cited in the ISR.

Document 2 describes a cultivation control device for organisms and cells provided with means for measuring temperature, pH and the like, storage means for storing obtained measurement data, and control means for controlling the cultivation environment based on this data in order cultivate cells and microorganisms in a suitable cultivation environment.

In regard to the inventions of claims 9-14, using a combination of the cultivation control device for organisms and cells provided with means for measuring temperature, pH and the like, storage means for storing obtained measurement data, and control means for controlling the cultivation environment based on this data in order cultivate cells and microorganisms in a suitable cultivation environment with the temperature control device described in document 1 would be easily arrived at by a person skilled in the art.

**PATENT COOPERATION TREATY**

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

**PCT**

**TRANSLATION**

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

(PCT Rule 43bis.1)

Date of mailing  
(day/month/year)

Applicant's or agent's file reference <b>FP18733WO-00</b>		FOR FURTHER ACTION See paragraph 2 below	
International application No. <b>PCT/JP2004/011292</b>	International filing date (day/month/year) <b>30.07.2004</b>	Priority date (day/month/year) <b>14.01.2004</b>	
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Applicant <b>DAIKIN INDUSTRIES, LTD.</b>			

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In regard to the inventions of claims 9-14, using a combination of the cultivation control device for organisms and cells provided with means for measuring temperature, pH and the like, storage means for storing obtained measurement data, and control means for controlling the cultivation environment based on this data in order cultivate cells and microorganisms in a suitable cultivation environment with the temperature control device described in document 1 would be easily arrived at by a person skilled in the art.